Beam Studies and Developments for the Injectors

APEX Workshop 9Nov05 ahrens

Planned activities for 2006

- Categorize as:
  - Set up
  - Commissioning
  - Study
- Exclude explicitly polarized proton work

Subject (proton beam)	motivation	Type	leader / players
AtR longitudinal emittance match	RHIC proton beam quality	Co Se	Blaskowicz/ rf group
AtR arc trajectory tuning with RHIC at Store	Maintain high transfer beam quality: transverse, intensity	Co	Glenn,Drees/
BtA transverse matching	AGS beam quality: intensity, hori - polarization	Co Se	Tsoupas/ Glenn,
Booster D6 septum magnet influence on booster injection	Coexistance with NSRL	St	Tsoupas/ Zeno,
AGS Response Matrix meas	understand AGS optics/systems	St	Bai/
AGS tune meter / coherence monitor	Beam behavior up the AGS ramp	Co	Ahrens,Bai/
AGS injection transverse apertures	High intensity proton – and general understanding	St	Gardner/ Ahrens,Lee
Booster injection transverse apertures	High intensity protons – and general understanding; new loss detectors	St	K.Brown/ Ahrens,
AtR new stripping foil behavior	Prep for a Gold run	St	Tsoupas/ Ahrens
Model development / testing Booster, AGS, transfer lines	Machine performance understanding	St	KBrown,Molitsky /Ahrens,

Subject (gold beam)	motivation	Type	leader / players
Transverse emittance cooling during AGS acceleration	Understand- possible applications here and elsewhere	St	Ahrens, Trbojevic
BtA foils performance measurement (if/when have new foils available)	Quality (longitudinal, intensity) of gold beam for RHIC injection	St	Marr/ Ahrens, Zeno, Thieberger